

REMARKS

This Amendment responds to an Office Action mailed September 11, 2002, with respect to the above-identified application. Claims 1 through 20 are pending in the application. The Office Action objected to the drawings and the specification. Further, Claims 1-4, 7-9, 10-13, and 16-18 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,227,491 to Stephan et al. ("Stephan"). Also, Claims 5-6, 14-15, and 19-20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Stephan in view of U.S. Patent No. 3,050,790 to Wakefield ("Wakefield"). The Office Action was not made final. Applicant has clarified the figures and accompanying textual description, and made corrections to the specification. Based on the following response, Applicant respectfully requests reconsideration and allowance of Claims 1-20.

Rejections Under § 102(e)

Claims 1-4, 7-9, 10-13, and 16-18 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,227,491 to Stephan et al. ("Stephan"). The Office Action stated that Stephan discloses "a releasable snap-in window assembly for an aircraft with an inner perimeter that defines an opening (7). The assembly comprises an inner (3) and outer (1) window frame attachable to the sidewall (6) adjacent the inner perimeter. The inner window frame (3) defines a first opening (unnumbered). The outer window frame (1) attachable to the inner window frame (3) adjacent the first opening. The outer window frame (1) defines a second opening (unnumbered)." Applicant respectfully traverses.

Stephan discloses a system which allows an inner window frame to be joined to an outer window frame without adhesives or fasteners such as screws. However, as with other prior art systems, Stephan requires screw-type brackets or a similar mechanism to attach an inner window frame to a cabin sidewall:



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FIG. 2 shows a side-wall panel 6 for accommodating three window units W, in the view from the outside O in the direction of the aircraft cabin I. Above the left-hand opening 7 in the side-wall panel 6 a sun-visor guide 10 is connected to the side-wall panel 6 via a four screws 11 or the like. In addition to the task of guiding a sun-visor 4 of the window unit W, the sun-visor guide 10, when installed, also has the possibly necessary components for connecting the window unit W to the side-wall panel 6.

Stephan, column 4, lines 7-15 (emphasis added). In addition, Figures 2, 4, 5, and, most of all, 8, show screws 11 as being used to mount the window frame assembly of Stephan to the cabin sidewall. FIGURE 8 is close-up cross-sectional view of the window assembly as mounted to the aircraft cabin wall, showing screws 11 anchoring the sun-visor guide 10 to the cabin wall 6. Moreover, in describing this arrangement, Stephan describes how these screws 6 engage threaded inserts 22 glued to the cabin wall 6:

The sun-visor guide 10 is fixed to the side-wall panel 6 via screws 11 which engage, for example, into threaded inserts which are glued into the side wall panel 6.

Stephan, column 5, lines 52-55. Thus, Stephan makes use of screws or screws and adhesives for attaching the inner window frame to the cabin wall. As a result, Stephan neither teaches nor suggests the subject matter of the amended claims.

Stephan does not teach or suggest the claimed invention. Specifically, Stephan does not teach or suggest “a first deformable mechanism tensionably securing a shaped flange of the inner window frame to the sidewall” as recited in Claim 1, as amended. Instead, Stephan discloses an inner window frame being mounted to a sun shade guide that is screwed to fasteners adhesively mounted to the cabin sidewall, as previously described. Therefore, Applicant respectfully submits that Claim 1 is not anticipated by Stephan. Applicant respectfully requests reconsideration and allowance of Claim 1.

Similarly, Stephan does not teach or suggest “securing a shaped flange of the inner window frame to the sidewall with at least one first deformable mechanism tensionably securing



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a shaped flange of the inner window frame to the sidewall” as recited in Claim 10, as amended. Therefore, Applicant respectfully submits that Claim 10 is not anticipated by Stephan.

In addition, Claims 2-4, 7-9, 11-13, and 16-18 depend from claims which are patentably distinct from the reference applied and add additional limitations. Accordingly, Applicant respectfully requests reconsideration and allowance of Claims 1-4, 7-9, 10-13, and 16-18.

Rejections Under § 103(a)

Claims 5-6, 14-15, and 19-20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Stephan in view of U.S. Patent No. 3,050,790 to Wakefield ("Wakefield"). Applicant respectfully submits that a *prima facie* case of obviousness has not been set forth.

As discussed above Stephan discloses an inner window frame being mounted to the cabin side-wall by screws through a sun-shade guide, and with the screws engaging fasteners adhesively mounted to the cabin sidewall, as previously described. As also discussed above, Stephan does not teach or suggest “tensionably securing a shaped flange of the inner window frame to the sidewall” as recited in Claim 1 or “securing a shaped flange of the inner window frame to the sidewall with at least one first deformable mechanism tensionably securing a shaped flange of the inner window frame to the sidewall” as recited in Claim 10. Similarly, Stephan does not teach or suggest “an inner window frame attachable to the sidewall adjacent to an inner perimeter by at least one first deformable mechanism tensionably securing a shaped flange of the inner window frame to the sidewall” and “a means for releasably coupling the outer window frame and the inner window frame within the first opening of the inner window frame, wherein the releasably coupling means includes a shaped flange of the inner window frame attached to the outer side wall by one or more spring clips and coupled to a hook shaped deformable flange of the outer window frame” as recited in Claim 19.

Wakefield does not overcome this deficiency of Stephan. Wakefield discloses a system for closing an openable aircraft window using a rotating latch mechanism. More specifically,



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Wakefield teaches a latch which rotates in a plane parallel to the window for applying tension and thereby securing the window once the window has been moved into a closed position. Further, the rotating latch mechanism of Wakefield only discloses means to latch an openable, sliding window that already is structurally mounted to the cabin wall. The rotating latch of Wakefield merely latches the window in place within its frame; it Wakefield teaches nothing regarding mounting the window frame to the aircraft wall. Because Wakefield teaches latching a slidable, already structurally mounted window in place, and Stephan teaches structurally mounting a window, the applicant submits that combining these references does not teach or suggest the claimed invention.

Turning to the claims, the claims presented patentably distinguish over the applied references. For the reasons previously described, Claims 5-6 and 14-15, depend from claims which already are patentably distinct from the subject matter of Stephan. Because the independent claims from which these claims depend are novel and patentable, the dependent claims are not rendered obvious in view of Wakefield.

The combination of Stephan and Wakefield does not teach or suggest "tensionably securing a shaped flange of the inner window frame to the sidewall" as recited in Claim 1 or "securing a shaped flange of the inner window frame to the sidewall with at least one first deformable mechanism tensionably securing a shaped flange of the inner window frame to the sidewall" as recited in Claim 10. Similarly, Stephan and Wakefield do not teach or suggest "an inner window frame attachable to the sidewall adjacent to an inner perimeter by at least one first deformable mechanism tensionably securing a shaped flange of the inner window frame to the sidewall" and "a means for releasably coupling the outer window frame and the inner window frame within the first opening of the inner window frame, wherein the releasably coupling means includes a shaped flange of the inner window frame attached to the outer side wall by one or more spring clips and coupled to a hook shaped deformable flange of the outer window frame" as recited in Claim 19. As a result, applicant respectfully submits that a *prima facie* case of



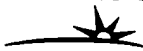
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obviousness has not been set forth, and that Claims 1, 10, and 19 are patentable over the combination of Stephan and Wakefield. Claims 5-6 depend from Claim 1, Claims 14-15 depend from Claim 10, and Claim 20 depends from Claim 19. Because of their dependency and for other reasons, applicant respectfully submits that Claims 5-6, 14-15, and 19-20 are patentable over the combination of Stephan and Wakefield. Applicant respectfully requests reconsideration and allowance of Claims 5-6, 14-15, and 19-20.

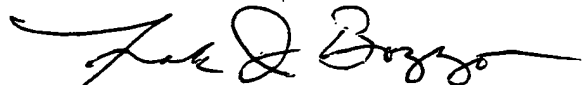
CONCLUSION

In view of the above amendments and remarks, applicant very respectfully submits that Claims 1-4, 7-9, 10-13, and 16-18 are not anticipated by Stephan. Applicant also very respectfully submits that Claims 5-6, 14-15 and 19-20 are patentable over the combination of Stephan and Wakefield. Further, applicant has amended the specification and the drawings to overcome the objections set forth in the Office Action without adding any new matter.

Applicant very respectfully submits that all claims pending in this application are patentable over the cited references and are in condition for allowance. Applicant very respectfully requests entry of the Amendment, and reconsideration and allowance of all claims.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Specification:

At page 3, line 6, please insert this paragraph:

“FIGURE 4A depicts a cutaway view of a deformable flange of an outer window frame receiving and tensionably engaging a shaped flange of an inner window frame.”

At page 4, line 24, please replace the current paragraph with this paragraph:

“The inner window frame 11 is releasably attached to the outer sidewall 5 via one or more spring clips 25 that are evenly spaced [within the interior surface]around an edge of a shaped flange 27 extending along the outer top perimeter of the inner window frame 11. In a preferred embodiment the spring clips 25 are secured to the outer sidewall 5 so that the spring clips 25 securely affix the shaped flange 27 to the outer sidewall 5. The spring clips 25 provide compressive spring force to secure assembly of the inner window frame 11 to the outer sidewall 5 in a snap-together assembly. The shaped flange 27 further provides one [ore]or more sun-shade guide track lugs 22. The sun-shade guide track lugs 22 facilitate the attaching of a sun-shade track 15 to the shaped flange 27.”

At page 4, line 33, please replace the current paragraph with this paragraph:

The outer window frame 13 is further releasably attached to the inner window frame 11 via the coupling of a deformable flange 29 of the outer window frame 13 and [the]a shaped flange [27]28. In a presently preferred embodiment, the deformable flange extends along a portion of the outer top perimeter of the outer window frame 13 and is designed such that it is formed to define a pliable hook 30 as further depicted in [FIGURE 4]FIGURES 4 and 4A. The deformable flange allows the coupling of the inner window frame 11 and the outer window frame 13 without the use additional coupling hardware, for example affixable brackets.

At page 5, line 9, please replace the current paragraph with this paragraph:

“FIGURE 4 depicts a side view of an upper portion of an outer window frame 13 to show the coupling of the outer window frame 13 to the inner window frame 11 attached to a an outer sidewall 5. As further depicted in FIGURE 3, spring clips 25 are attached to the outer sidewall 5



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and secure a shaped flange 25 to the outer sidewall 5. A deformable flange 29 of the outer window frame 13 is positioned over the top center of the inner window frame 11 and is snapped over the shaped flange [27]28 (FIGURE 4A) so that both the inner window frame 11 and the outer window frame 13 are engaged in a snap-together assembly. [The dotted lines 28 depict the snap-together range of motion to show the deformable flange 29 engaging the shaped flange 25]As shown in the cutaway view of FIGURE 4A, a deformable flange 29 on the outer window frame 13 has a cross-sectional form in the nature of a pliable hook 30. The deformable flange 29 tensionably engages the shaped flange 28 of inner window frame 11. Because of the interrelationship of the deformable flange 29 of the outer window frame 13 and the shaped inner flange 28 of an inner window frame 11, the outer window frame 13 can be snapped onto the inner window frame 11 in the same way, for example, that a lid is snapped onto a can of tennis balls, or that a paint can engages its lid.”.

At page 5, line 30, please replace replace the current paragraph with this paragraph:

“The inner window frame [13]11 is further releasably attached to the outer sidewall 5 via at least one retention spring clip 31 centered within the interior surface of a gusset 33 supported shaped flange 35 extending along the lower bottom perimeter of the inner window frame 13.”



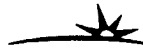
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In the Claims:

1. (Amended) A releasable snap-in window assembly for an aircraft having a sidewall with an inner perimeter that defines an opening, the assembly comprising;
an inner [and outer]window frame attachable to the sidewall adjacent to the inner perimeter by at least one first deformable mechanism tensionably securing a shaped flange of the inner window frame to the sidewall, the inner window frame defining a first opening; and
[the]an outer window frame attachable to the inner window frame adjacent the first opening by at least one second deformable mechanism tensionably securing the outer window frame to the inner window frame, the outer window frame defining a second opening.
2. (Amended) The window assembly of Claim 1, ~~further comprising a releasable coupling means, wherein the releasable coupling means includes a shaped flange of the inner window frame attached to the outer side wall and coupled to a deformable flange of the outer window frame, wherein the first deformable mechanism is a deformable flange secured to the sidewall, the deformable flange tensionably engaging the shaped flange of the inner window frame.~~
4. (Amended) The window assembly of Claim [2]1, wherein the ~~shaped flange is further attached to the outer sidewall by one or more spring clips.~~releasable coupling means furtherfirst deformable mechanism includes a pawl latch mechanism at least one spring clip mounted on an outer surface of the sidewall for tensionably securing the inner window frame to the sidewall.
5. (Amended) The window assembly of Claim 1, [wherein the releasable coupling means] further includ[es]ing a pawl latch mechanism for securing the inner window frame to the sidewall.
7. (Amended) The window assembly of Claim 1, wherein a second deformable mechanism for tensionably securing the outer window frame [is attached]to the inner window frame [by a plurality of]includes at least one fastening [devices]clip.
8. (Amended) The window assembly of Claim 7, wherein the fastening [devices include]clip includes a snap fasteners releasably secured to an accommodating protrusion on the outer window frame and that further snaps over [the]a perimeter of the inner window frame.



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10. (Amended) A method of releasably coupling a snap-in window assembly to a sidewall of an aircraft, the method comprising:

attaching an inner window frame to the sidewall adjacent to an inner perimeter, by securing a shaped flange of the inner window frame to the sidewall with at least one first deformable mechanism tensionably, the inner window frame defining a first opening; and

attaching an outer window frame readily attachable to the inner window frame adjacent the first opening, by securing the outer window frame to the inner window frame with at least one second deformable mechanism tensionably securing the outer window frame defining a second opening.

11. (Amended) The method of Claim 10, wherein [releasably coupling the snap-in window assembly to the sidewall includes engaging a shaped flange of the inner window frame attached to the outer side wall and a deformable flange of the outer window frame]the first deformable mechanism is a deformable flange secured to the outer surface of the sidewall, and the deformable flange tensionably engages the shaped flange of the inner window frame.

13. (Amended) The method of Claim 11, wherein the [shaped flange is further attached to the outer sidewall by]first deformable mechanism includes at least one [or more]-spring [clip] mounted on an outer surface of the sidewall.

14. (Amended) The method of Claim 10, [wherein releasably coupling the snap-in window assembly to a]further comprising securing the inner window frame to [a] the sidewall [of an aircraft includes]using a pawl latch mechanism.

16. (Amended) The method of Claim 10, wherein the second deformable mechanism for tensionably securing the outer window frame [is attached]to the inner window frame by a plurality of comprises at least one fastening [devices] clip.

17. (Amended) The method of Claim 16, wherein the fastening device[s] includes at least one snap fastener[s] releasably secured to an accommodating protrusion on the outer window frame and that further snaps over ~~the a~~ perimeter of the inner window frame.

19. (Amended) A snap-in window assembly for an aircraft having a sidewall with an inner perimeter that defines an opening, the assembly comprising:



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an inner window frame attachable to the sidewall adjacent to an inner perimeter by at least one first deformable mechanism tensionably securing a shaped flange of the inner window frame to the sidewall, the inner window frame defining a first opening;

an outer window frame readily attachable to the inner window frame by a plurality of fastening devices releasably secured to an accommodating protrusion on the outer window frame and that further snap over ~~the~~ a perimeter of the inner window frame adjacent the first opening, the outer window frame defining a second opening; and

a means for releasably coupling the outer window frame and the inner window frame within the first opening of the inner window frame, wherein the releasably coupling means includes a shaped flange of the inner window frame attached to the outer side wall by one or more spring clips and coupled to a hook shaped deformable flange of the outer window frame and a pawl latch mechanism for engaging the shaped flange along one or more index points to couple and decouple the window assembly from the outer sidewall.



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Paper No. 6

Notice of Non-Compliant Amendment (37 CFR 1.121)

The amendment filed on 2-11-03 is considered non-compliant because it has failed to meet the requirements of 37 CFR 1.121, as amended on September 8, 2000 (see 65 Fed. Reg. 54603, Sept. 8, 2000, and 1238 O.G. 77, Sept. 19, 2000). In order for the amendment to be compliant, applicant must supply the following omissions or corrections in response to this notice.

THE FOLLOWING ITEMS ARE REQUIRED FOR COMPLIANCE WITH RULE 1.121 (APPLICANT NEED NOT RE-SUBMIT THE ENTIRE AMENDMENT):

- ☒ 1. A clean version of the replacement paragraph(s)/section(s) is required. See 37 CFR 1.121(b)(1)(ii).
- ☒ 2. A marked-up version of the replacement paragraph(s)/section(s) is required. See 37 CFR 1.121(b)(1)(iii).
- ☐ 3. A clean version of the amended claim(s) is required. See 37 CFR 1.121(c)(1)(i).
- ☐ 4. A marked-up version of the amended claim(s) is required. See 37 CFR 1.121(c)(1)(ii).

Explanation: _____

(LIE: Please provide specific details for correction to assist the applicant. For example, "the clean version of claim 6 is missing.")

For further explanation of the amendment format required by 37 CFR 1.121, see MPEP § 714 and the USPTO website at <http://www.uspto.gov/web/offices/dcom/olia/pbg/sampleaf.pdf>. A condensed version of a sample amendment format is attached.

- ☐ **PRELIMINARY AMENDMENT:** Unless applicant supplies the omission or correction to the preliminary amendment in compliance with revised 37 CFR 1.121 noted above within ONE MONTH of the mail date of this letter, examination on the merits may commence without entry of the originally proposed preliminary amendment. This notice is not an action under 35 U.S.C. 132, and this ONE MONTH time limit is not extendable.
- ☒ **AMENDMENT AFTER NON-FINAL ACTION:** Since the above-mentioned reply appears to be *bona fide*, applicant is given a TIME PERIOD of ONE MONTH or THIRTY DAYS from the mailing of this notice, whichever is longer, within which to supply the omission or correction noted above in order to avoid abandonment. EXTENSIONS OF THIS TIME PERIOD MAY BE GRANTED UNDER 37 CFR 1.136(a).

Elizabeth Norman Boer
Legal Instruments Examiner (LIE)